



## Countering Weapons of Mass Destruction: *Air Force Roles and Responsibilities*

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The U.S. Army leadership met at the Army War College for its Unified Quest 2013 wargame in February of this year. As that group discussed how the Army would address its future challenges beyond 2020, one of the topics on which the group focused was how to counter weapons of mass destruction (WMD). Among other tasks, the scenario called for the capability to eliminate the WMD program of a failed state. This statement in an Army Times article stood out:

The group spent most of a working day debating what the Army's WMD mission should look like, and since it's their job to find as many nits to pick as possible, the proceedings were decidedly gloomy.

"The Army, much like counterinsurgency, has to own this," another participant said, "because no one else has the capacity to do it other than the Army."<sup>1</sup>

This is an interesting statement, given that the Army has not traditionally had a leadership role within the Department of Defense (DoD) when it comes to discussions on policy and strategy to counter WMD. Its leadership has been much more prominent in developing chemical and biological (CB) defense capabilities, given that it is the only Service that has a dedicated career field and a significant defense infrastructure in that area, but not so much in counterproliferation or the broader issue of countering WMD. And no question, the U.S. Air Force has benefitted from the Army's leadership and defense infrastructure in CB defense – but it is the Air Force who has the legacy for leading the discussion and development of counterproliferation theory and practice from the beginning of the Defense Counterproliferation Initiative in 1994.

The challenges faced in Operation Desert Storm, specifically the "Scud hunts," led the Air Force to focus on developing concepts to counter future adversaries armed with CB weapons. Certainly the very terms "counterforce," "active defense," and "passive defense" defined within counter-WMD strategy<sup>2</sup> all have roots in Air Force doctrine and strategy dating back to the early part of the Cold War. Air Force officers from U.S. Strategic Command and U.S. Special Operations Command led the

development of an initial DoD counterproliferation concept of operations in 2000-2002, which established the initial concept seen in the first Joint Publication 3-40, "Combating WMD."

Between 2000-2002, the Air Force leadership held a series of workshops and briefings to examine the impact of WMD on Air Force operations, acknowledging the need to shift from an emphasis on ensuring that its forces merely survive a WMD attack to ensuring that the Air Force maintain a high level of operations tempo throughout a campaign, despite the use of WMD. This critical review initiated a number of efforts that would improve counterforce and passive defense capabilities over time,<sup>3</sup> but interest in countering WMD issues significantly dropped between 2004 and 2011. As other more compelling operational priorities emerged over the past decade, the Air Force was not seen as "owning" a substantial investment in counter-WMD capabilities, as it does with the nuclear enterprise. The question remains today, does the Air Force "own" any part of counter-WMD strategy?

### - A Shift in Priorities -

The Air Force's decreased involvement in counter-WMD discussions came about as the result of two major events. First, the failure to discover an active WMD program after the 2003 invasion of Iraq led to a more relaxed attitude toward CBRN defense readiness and the need to improve counter-WMD capabilities across the Department. Some may have taken the incorrect view that the threat of massive retaliation was all that was needed to deter a rogue state from using CB weapons,<sup>4</sup> and that it was not critical to invest in counter-WMD capabilities.

Although there continued to be a national discussion on the potential threat to the homeland posed by sub-state groups seeking WMD materials (notably in the 2006 Quadrennial Defense Review), this was seen as more of an Army issue (domestic response to a CBRN incident, WMD elimination) or Navy issue (maritime interdiction operations).<sup>5</sup>

Second, OSD decided to change the management of the DoD

Chemical-Biological Defense Program (CBDP) in 2003, reducing the role of the Service acquisition offices in favor of project management through the Joint Program Executive Office for CB Defense and Defense Threat Reduction Agency (DTRA). The Army also led coordination of the four Services' CB defense test and evaluation capabilities, primarily conducted at Dugway Proving Ground.<sup>6</sup> Congress had directed the Department to move all DoD funding for CB defense research and development (except for DARPA) to a single OSD program element in 1993, but the Services had considerable latitude between 1998 and 2002 as to how and where the money was spent. As a direct result of the 2003 change in management, the Air Force acquisition and operational test agencies decreased their levels of investment and active participation in the CBDP. CB defense became an OSD, not an Air Force, budget issue. Similarly, countering WMD became an OSD/Joint Staff issue, often focusing on passive defense/consequence management issues, within which Services and combatant commands would passively participate.

Between 2003-2012, OSD and the Joint Staff worked on counter-WMD strategy and policy documents (to include Proliferation Security Initiative, Combating WMD Joint Integrating Concept, National Military Strategy to Combat WMD, WMD elimination task force, Defense Support of Civil Authorities), but Air Force involvement was limited. Attention was focused (rightly) on other, higher priorities – providing air defense over the homeland, supporting irregular warfare operations in the Middle East, developing cyberspace issues, and addressing challenges identified in the review of the nuclear enterprise. However, this came at a price of losing institutional knowledge and operational capability in this technically-focused mission area.

Today, there is no mention of “counterforce” in Air Force doctrine other than in AFPD 3-40, “Counter-CBRN Operations.” With the end of the Airborne Ballistic Laser project, there is no discussion on intercepting WMD-laden delivery systems during military combat operations. The Air Force has increasingly withdrawn from joint CB defense projects, resulting in a less than adequate modernization effort in passive defense and consequence management. Although Defense Secretary Rumsfeld designated WMD elimination and interdiction as special interest topics for U.S. Strategic Command in 2005,<sup>7</sup> the Air Force has not been a significant participant in discussions on those two mission areas.

Recent events have demonstrated that the imminent threat of nuclear, biological, and chemical warfare has not yet departed from the world stage. During the air operations over Libya in Operation Odyssey Dawn, the military coalition had a very limited capability to strike Libyan chemical sites without allowing the release of hazardous plumes, despite having faced this same issue in 1991 and 2003 when targeting Iraqi WMD production and weapon sites. The conflict in Syria demonstrate that this requirement will still exist in future operations. While the Joint Requirements Oversight Council approved a “WMD Defeat Initial Capability Document” in 2010, it is unclear when a modern strike capability will be available. North Korea’s continuing aggressive behavior includes the potential threat of nuclear,

biological, and chemical weapons use against U.S. airbases, but increasing competition for operations and maintenance funding has resulted in maintaining CB defense capabilities to lowered priorities. The cost of operating sensitive, automated biological detectors at key air bases, for instance, is being myopically viewed as excessively expensive rather than as a top operational priority on the Peninsula.

### **- Creating a New Defense Strategy -**

OSD and the Joint Staff are developing a National Defense Strategy to Counter WMD that will replace the 2006 National Military Strategy to Combat WMD within this year. This document has some significant changes from the 2006 strategy, notably the abandonment of the three pillars of nonproliferation, counterproliferation, and consequence management for a more interagency-friendly approach that builds on the “prevent, protect, respond” mantra of the counter-WMD community. By doing so, this allows DoD policy-makers to better synchronize their objectives to deter, defeat, and roll back nation-state WMD programs and to prevent sub-state groups from acquiring and using WMD. This is a long-overdue policy effort that will improve the coordination and collaboration between the traditional counterproliferation and counter-terrorism communities.

Although this action improves interactions between the two communities (planning and resourcing discussions in particular), it does not significantly change U.S. policy direction. “Prevent, protect, respond” is a more general way to say “nonproliferation, counterproliferation, consequence management” without the accumulated baggage that the older terms have developed. By broadening the discussion, national security leaders can engage in a more time-phased, interagency-friendly lexicon that benefits the review of strategy and policy. It also removes the limitation of eight mission areas for a more general discussion of possible means to the end state objective.

On the other hand, this new strategy continues a narrow focus on the technology development and unique weapons effects of WMD, which in turn results in specialization within the OSD, Joint Staff, and Service staffs. In general, the primary defense officials working WMD issues in each of the above agencies will be in one office working on acquisition of defense equipment related to counter-WMD (usually CBRN defense-related) and one office in policy.<sup>8</sup> Everyone else assumes they do not have to deal with WMD because these offices “take care of it.”

Ideally, countering WMD was a capability that was to be integrated across the Joint Operating Concepts and Functional Capability Boards developed by the Joint Staff.<sup>9</sup> For instance, major combat operations would include counterforce, active defense, and passive defense capabilities to address WMD threats on traditional battlefields. Under irregular warfare, one might expect to find a discussion on the challenges of tracking and targeting sub-state groups who show interest in acquiring or transporting WMD. Under homeland defense/civil support, there should be a discussion about protecting individuals on military installations and facilities from CBRN hazards as well as providing defense support to civil authorities through the CBRN Response Enterprise. In cooperative security, one

should find discussions on both enabling security cooperation on counter-WMD measures and conducting WMD interdiction operations. Within the concept for stabilization, security, transition and reconstruction, threat reduction cooperation and WMD elimination need to be discussed. But the general defense analyst or military staffer does not “do” WMD issues, at least not as long as they can be delegated to that one “special” WMD office. As an example, the Protection Functional Capability Board is the only one that addresses counter-WMD programmatic and capability development issues today.

Most are familiar with the generalization that “WMD is an aspect of warfare across the range of military operations.”<sup>10</sup> But the day-to-day nature of conventional military operations and lack of historical WMD use against U.S. forces since World War 1 means that most military agencies do not have WMD issues at the top of their task list. Despite statements that WMD represent the “gravest danger to the American people and global security”<sup>10</sup> and that any operational scenario might include its use against U.S. forces or strategic interests, it is a special interest topic, relegated out of daily discussions and significant war-games and limited to technical discussions on WMD effects and conjectures on the value of deterrence. The result of this gradual isolation of WMD issues is that WMD analysts develop the doctrine, operational plans, and concepts for how the Joint Force will develop counter-WMD concepts and equipment, rather than the operational community and acquisition experts.

### **- Reasserting Air Force C-WMD Responsibilities -**

We cannot afford a disconnect between policy makers developing DoD counter-WMD instructions and the Services’ staffs who have to articulate and implement day-to-day practices for the operational force. Similarly, we cannot afford to relegate management of a “joint” counter-WMD acquisition portfolio to OSD during a time of decreasing defense budgets and continuing overseas military operations. The Air Force needs to determine what counter-WMD capabilities it needs and can sustain for its operational missions. There is no better approach than to have Air Force leaders determining how to best integrate CBRN defense, air-missile defense, and counterforce capability development through its Core Function Master Plans (CFMPs).

Similarly, there is no better approach than to have Air Force planners determine force structure requirements for CBRN defense missions in the context of military combat operations, installation protection, and civil support. Air Force strategy and policy-makers need to understand the impact of WMD within the Air-Sea Battle, where integrated air and missile defense needs to address WMD delivery systems, what the vulnerability of forward air bases are to WMD threats. These issues cannot be left solely to the WMD specialists, but rather must be developed by Air Force planners with those subject-matter experts in support of future Air Force operations and plans.

The 2012 Defense Strategic Guidance notes that the “proliferation of nuclear, biological, and chemical weapons technology has the potential to magnify the threats posed by regional state actors” as well as that of sub-state groups. A military force can expect to face nuclear, biological, or chemical weapons or exposure to CBRN hazards in nearly any region of

the world. To address this defense guidance, there are designated Air Staff offices that develop counter-WMD policy, operational, and acquisition issues. The AF/A5X (Operational Planning, Policy and Strategy) addresses arms control and counter-proliferation topics, with AF/A3O (Operations) responsible for homeland defense/civil support. The AF/A7C (Civil Engineer) supports the development of CBRN defense capabilities with a heavy focus on installation preparedness and emergency management. The AF/SG (Surgeon General) develops the requirements for medical countermeasures for CBRN hazards and implements health surveillance policy. AF/A10 (Strategic Deterrence) has the nuclear weapons issues. SAF/AQ (Acquisition) ensures that CB defense equipment developed under the DoD CBDP meets Air Force requirements, Air Force labs meet biosurety regulations, and CBRN survivability guidelines are addressed in Air Force acquisition projects.<sup>11</sup>

When the new National Defense Strategy is released, these responsibilities within the Air Force will not significantly change. The Air Force will, however, have to revise its existing policies and doctrine to align with the new defense guidance. This offers an opportunity to significantly overhaul the current “Counter-CBRN” strategy and deconflict the overlaps of counter-WMD responsibilities between Air Force staff offices, for instance, addressing CBRN defense in the context of counter-proliferation, installation preparedness/emergency management, and homeland defense/civil support. It also sets the stage for the Air Force leadership to evaluate how the Air Force develops its unique contributions to the counter-WMD mission.

One does not generally see AF/A8 (Strategic Plans and Processes) in discussions about counter-WMD capabilities or plans. While the 2012 Air Force Posture Statement acknowledges WMD proliferation as a concern,<sup>12</sup> the Air Force modernization priorities are supporting air and space control (e.g., F-35 JSF, KC-46A refueling tanker, F-16 service-life extension); global intelligence, surveillance, and reconnaissance (ISR) (e.g., Space-Based Infrared and Advance Extremely High Frequency satellites, space launch capability); global mobility (e.g., modernizing the C-5 and C-17 airlift fleet); and global strike (e.g., Long Range Strike Bomber). In addition, strengthening the Air Force nuclear enterprise and developing tools for cyberspace superiority are top Air Force priorities. These should not be surprising topics – they represent the unique Air Force contributions to national security. But in developing these capabilities, the Air Force must also invest in counter-WMD capabilities to ensure that its operations will not be degraded by adversarial use of nuclear, biological, or chemical weapons.

The current CFMPs do not discuss development of Air Force -unique capabilities to counter WMD, with the exception of the Agile Combat Support, which addresses CBRN defense capability development. Given that countering WMD is a top defense priority, one might expect to find the CFMPs include development of the following counter-WMD capabilities:

- Building Partnerships – Support to arms control activities, theater security cooperation, threat reduction activities (supporting CTR), and air interdiction operations (supporting PSI)
- Global Integrated ISR – ISR support to arms control, air interdiction operations, and counterstrike and air-missile defense

- operations involving WMD sites/delivery systems
- Global Precision Attack – specialized munitions and assessment tools for counterstrike and air-missile defense operations involving WMD sites/delivery systems
- Special Operations – specialized capabilities against WMD sites/delivery systems prior to employment against U.S. forces
- Agile Combat Support – CBRN defense capabilities (medical and non-medical) for air base operations and installation preparedness, nuclear accident/incident response, homeland defense/civil support, and WMD elimination
- Rapid Global Mobility – specialized transportation assets for WMD elimination and consequence management forces (in particular, dealing with contaminated materiel/personnel)

Many of these Air Force capabilities are known to exist at various levels of maturity, and certainly the Air Force has talented individuals and agencies that could accomplish these missions as tasked during actual contingencies. However, people rotate, budgets change, emphasis can be lost and capabilities degraded. The Air Force must be able to offer sound, executable options to the president and combatant commands when they are faced with an adversary that can deliver nuclear, biological, and chemical weapons against U.S. forces or strategic interests.

If the Air Force wants to “hold any target at risk across the air, land, and sea domains through global precision attack,”<sup>13</sup> then it will require specialized munitions to attack WMD production and storage sites. As the Army’s end-strength goes down over the next decade, the Air Force will be asked to contribute more to the CBRN Response Enterprise, WMD elimination, and interdiction operations. Developing necessary counter-WMD capabilities within the Air Force CFMPs is a prudent investment into the nation’s national security enterprise.

We cannot let the technical and esoteric nature of nuclear, biological, and chemical weapons effects and countermeasures overwhelm the Air Force operational planners and material developers. The national security establishment has refused to “think about the unthinkable” by allowing the arms control and nuclear enterprise to lead the discussion on countering WMD and by not examining the impact of WMD on military operations through wargames and general discussions. This has resulted in a “low resources, high rhetoric” debate on a topic that has been described as a “low probability, high consequence” event. The time has come to responsibly reclaim the discussion within the general discourse of strategy and warfighting. Developing Air Force-unique counter-WMD capabilities within the various CFMPs is a credible way to start the discussion.

## NOTES:

1. Paul McLeary, “Planners mull WMD: The next counterinsurgency?” *Army Times*, February 14, 2013, available at <http://www.armytimes.com/news/2013/02/army-wmd-next-counterinsurgency-021413/>.
2. In the context of counter-WMD, counterforce refers to offensive operations to strike adversary CBRN weapons and associated facilities prior to use, not to be confused with “counterforce” as an aspect of nuclear deterrence.

3. See for instance, Charles Heflebower, Laura Gallo, John Lawrence, and Bert Cline, “Counter-WMD Concepts of Operations at U.S. and Allied Air Bases,” USAF Counterproliferation Center, Maxwell AFB, May 2005.
4. Wade Boese, “U.S. Issued Warning on Threat of Possible Iraqi WMD Use,” *Arms Control Today*, May 2003, available at <http://www.armscontrol.org/print/1274>.
5. DoD, *Quadrennial Defense Review Report*, 2006, pp. 15, 26, 32-35, 51-53
6. USD(AT&L) memorandum, subject: “Implementation Plan for the Management of the Chemical Biological Defense Program (CBDP),” dated April 22, 2003. Available at [http://www.acq.osd.mil/cp/dodg/app2\\_cbdp.imp.plan.22apr03.pdf](http://www.acq.osd.mil/cp/dodg/app2_cbdp.imp.plan.22apr03.pdf).
7. Statement of Jack David, DASD(CWMD/NP), to the House Homeland Security Committee, June 22, 2006, p. 2, available at <http://www.dod.mil/dodgc/olc/docs/TestJackDavid060622.doc>.
8. For instance, OSD hosts its WMD expertise under the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense under (USD)AT&L and the Assistant Secretary of Defense for Global Strategic Affairs under USD(Policy). The Joint Staff has its WMD experts in the J5 WMD division and J8 Joint Requirements Office for CBRN Defense. There are other small pockets of WMD expertise on the OSD/JS staffs, but the predominance is in these offices. Similarly, each Service has (generally) one primary office for C-WMD policy and one primary office for CBRN defense acquisition.
9. See <http://www.dtic.mil/futurejointwarfare/concepts.htm> for more information on these concepts.
10. 2010 National Security Strategy, p. 8.
11. A more complete list of responsibilities, to include those of the major commands, can be found in Air Force Policy Directive 10-26, “Counter-Chemical, Biological, Radiological, and Nuclear Operations,” November 2009.
12. Honorable Michael Donley and Gen Norton Schwartz, “FY13 Air Force Posture Statement,” February 28, 2012, p. 2, available at <http://www.posturereport.af.mil/shared/media/document/AFD-120321-055.pdf>.
13. *Ibid*, p. 4.

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